

Mediation as Metaphor and Method: The Visualization of an *Odissi* Body

Odissi (Fig. 1) is an eastern Indian classical dance form that can be traced to the oldest performing arts treatise called the *Natyasastra* written approximately between 200 B.C. to 200 C.E. It has homogenized various historical movement traditions, such as those of the *Maharis* (Fig. 2) or temple-dancers and the *Gotipuas* (Fig. 3) or young boys dressed as females. In the middle of the twentieth century, middle-class dancers appropriated, homogenized, and theatricalized these cultural practices into *Odissi* disenfranchising the earlier practitioners. Today, the dance is globally popular, circulating through numerous *Youtube* videos, 3D dance-films, major concert dance venues as well as throughout the Indian diaspora. My dissertation will investigate the changes accrued to *Odissi* dance as it has evolved over the past six decades while establishing embodied connections between the movement practice of contemporary *Odissi* dancers with their central historical figures, the *Maharis* and the *Gotipuas*. I use digital mediation through motion capture technology (Fig. 4) as a means to analyze *Odissi* movement by mediating multiple versions of the dance form from different time periods and by different choreographers. In addition to serving as an analytical tool, mediation functions as metaphor since the skeletal motion captured version of the ornate *Odissi* dancing body deconstructs the notion of beauty within *Odissi* by baring the marginalizations and erasures of historical figures within the form. In this paper I explore mediation as a methodology—both as a lens and an analytical tool—by converting the *Odissi* body into 3D data subsequently visualized as anthropomorphic systems.

I facilitate a creative juxtaposition of motion capture technology and *Odissi* movement. Motion capture technology digitizes *Odissi* movement to calibrate it onto a skeletal system that deconstructs the quintessential smile, hand-gestures, make-up, heel and toe movements, costume,

and facial expressions. It apparently disembodies the dancing *Odissi* body of its accouterments baring a skeletal system to then be used as an analytical tool for examining spatial tensions, inertia, weight-shift, and trajectory of movement. The 3D environment of the captured movement enables a three dimensional perspective to analyze the moving body based on kinetic properties. The 3D data can facilitate further visualizations of abstract figures or digitally created avatars in order to explore the multifarious technological possibilities of the mediated dancing *Odissi* body alongside disseminating it on the screen with an altered relationship to history, culture, corporeality, and embodiment.

The nationalist construction of *Odissi* dance is a curious partnership between Victorian puritanism and Indian upper-caste Brahmanical supremacy. After achieving political independence from British colonization, Indian elites decided to develop indigenous movement practices as a way to establish India's rich ancient heritage. *Maharis* and *Gotipuas* were instrumental in establishing the oral transmission of movement for over two thousand years. However, they were marginalized in the name of refinement, standardization, and codification of movement. Married to *Jagannath*, the presiding male Hindu deity of *Odissi*, by religious injunction, her ritual performance stood for the sexual pacification of *Jagannath*. Having undomesticated sexual relations outside of social marriage with the societal male elites, the *Mahari* body did not fit within the norm of monogamous conjugality and was deemed sexually excessive. Although cultural reformers in the 1950s based *Odissi* dance on *Mahari* ritual performance, the actual *Maharis* were criminalized and stigmatized as prostitutes. The newly emerging Indian citizen educated in British values of propriety found the *Mahari* transgressive of social norms and simplistically dismissed her as being unrespectable. Nevertheless, the patriarchal Brahmanical system that instituted *Mahari* services in the first place continued

unscathed. The *Mahari* institution died out in the 1960s as the last surviving *Mahari* passed away in March 2015 even though the *Gotipuas* continue to perform worldwide and thrive in their indigenous context in the eastern Indian state of Odisha. *Maharis* were scapegoated for an entire patriarchal tradition that was also emancipatory in some respects, such as *Maharis* enjoyed certain civil liberties unlike her contemporaneous domesticated wives at that time.

Interested in a conversation between the corporeal and the mediated dancing bodies of *Odissi*, I argue that the live *Odissi* dancing body is disembodied because of the marginalization of the *Gotipua* and the death of the *Mahari*, while the motion capture mediation and its subsequent visualizations resurface the embodiment of the erased *Mahari*. Here, mediation functions as a metaphor of embodiment as opposed to the reductive narrative of abstract disembodiment that techno-apocalyptic descriptions of information entail. I show that simplistic dichotomy of live embodiment and disembodied digitality does not hold in this situation to conclude that mediation is a metaphor for the historical foregrounding of the *Mahari* body on the verge of her disembodiment within the live *Odissi* dancing body. This interpretation of mediation is contrary to popular notions of acultural and ahistorical dimensions of the cyberspace as forwarded by noted Intermedia artist-scholar, Susan Broadhurst, when she theorizes mediation as “ahistorical amnesia.” Also, mediation functions as a tool to examine, dissect, manipulate, and experiment with movement. As a visual aid of augmenting practice, mediation opens up the possibilities of the scope of physical movement beyond its physical representation. The post-production animated digital shapes, either anthropomorphic or abstract, have clear vestiges of *Odissi* in them. Yet, they are very different from experiencing the live *Odissi* body. Mediation as embodiment of the *Mahari* or as a kinetic remnant of *Odissi* is indeed uncanny, a strangely familiar experience.

The skeletal mediation is imbued with digital quirks and extreme twists of bodily joints that are anatomically impossible. It is due to the imperfect translation of the moving body, a phenomenon that seeks to capture the kinetic motions through optical sensors. The instantaneous conversion of kinematic forces through a computational abstraction of physical movement into binary digits is marred with slippages and abstractions since certain movements are too fast or too small to capture. Yet, the dancing unit, calibrated from the captured data onto a human skeletal figure, emerges with the embodied qualities of the dancer. The embodiment of the dancer is apparent and the figure is a strange encounter between corporeality and mediation. While the intricate finger movement is absent, the bodily orientation, translation, and rotation in space gives a clear indication towards the existing repertoire being digitized. However, with the loss of expressive, codified, and functional elements, it is a ghostly rendition of the *Odissi* dancing body. The beautiful facial expressions and the colorful costumes are replaced by a skeletal carcass. The notion of beauty primary to the reception of an *Odissi* dancing body is substituted by a cadaverous figure, which evokes the death of the *Mahari* at the very site of the *Odissi* performer. The expressive face that evokes spiritual, joyous, romantic, emancipatory, and devotional feelings within the dancer as well as the audience, does not hold anymore. The motion captured cadaver can only achieve corporeal expressivity and its bodily movements accentuate the most important movement dynamic: the relationship between the hips, the waist, and the shoulders that otherwise lay subdued under the dominance of the face. Training in *Odissi* dance requires a deliberate control of the hips juxtaposed with a fluid torso. While shoulders remain motionless, most of the *Odissi* upper-body movement, especially in the Guru Kelucharan Mohapatra style in which I am trained, is restricted to circular torso trajectories grounded on stable hips. The lower body, mostly in plié has sharp heel, toe, and flat stomping movements.

The upper and the lower halves function autonomously with a stable core holding the center of gravity for the erect and generally upright dancing body. However, the motion captured avatar clearly goes against the value embedded in the dance form of *Odissi* in instantiating stable hips since in actuality the hips move. The dancer fails to hold on to absolute static hips for the entire length of the piece. The range of slight to considerably noticeable hip deflections of the skeletal body is a strange reminder of the *Mahari* body. The *Mahari* has been ostracized for her sexual transgressivity in the first place. However, the involuntary reinsertion of hip movement combined with the skeletal framework questions the proposed embodiment of the live *Odissi* dancing body. The control of hips is almost an inscription of *Mahari* erasure within the *Odissi* dancing body: a clear site of disembodiment in the name of creating docile dancing bodies.

The post-production digital animation created using prototypical avatars moving through the motion captured data from the *Odissi* dancing body are equally outlandish. The animation reminds of *Odissi* although remains further removed from the skeletal version due to its own expressivity, both emotional and corporeal, creating new meanings just as the anthroposkeletal structure. The infinitely reusable nature of the 3D data presents the animator multiple opportunities for manipulating movement, juxtaposing both manual animations using key frames alongside using the data.

This experiment enables a nuanced understanding of the digital space as culturally specific, historically contingent, metaphoric and analytical, embodied and abstract, and lastly, an uncanny experience of live mediation. It reflects the disembodiment of the live *Odissi* body by establishing culturally specific relations with history. It refutes the rhetoric of sheer abstraction and disembodiment of computational methodologies behind the creation of motion capture technology. Together, the combination of *Odissi* movement and motion capture technology

warns me to steer clear from two hegemonic dichotomies, one of disembodied computability and embodied movement, and the other of, historical cultural practice and technological mediation.

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Appendix

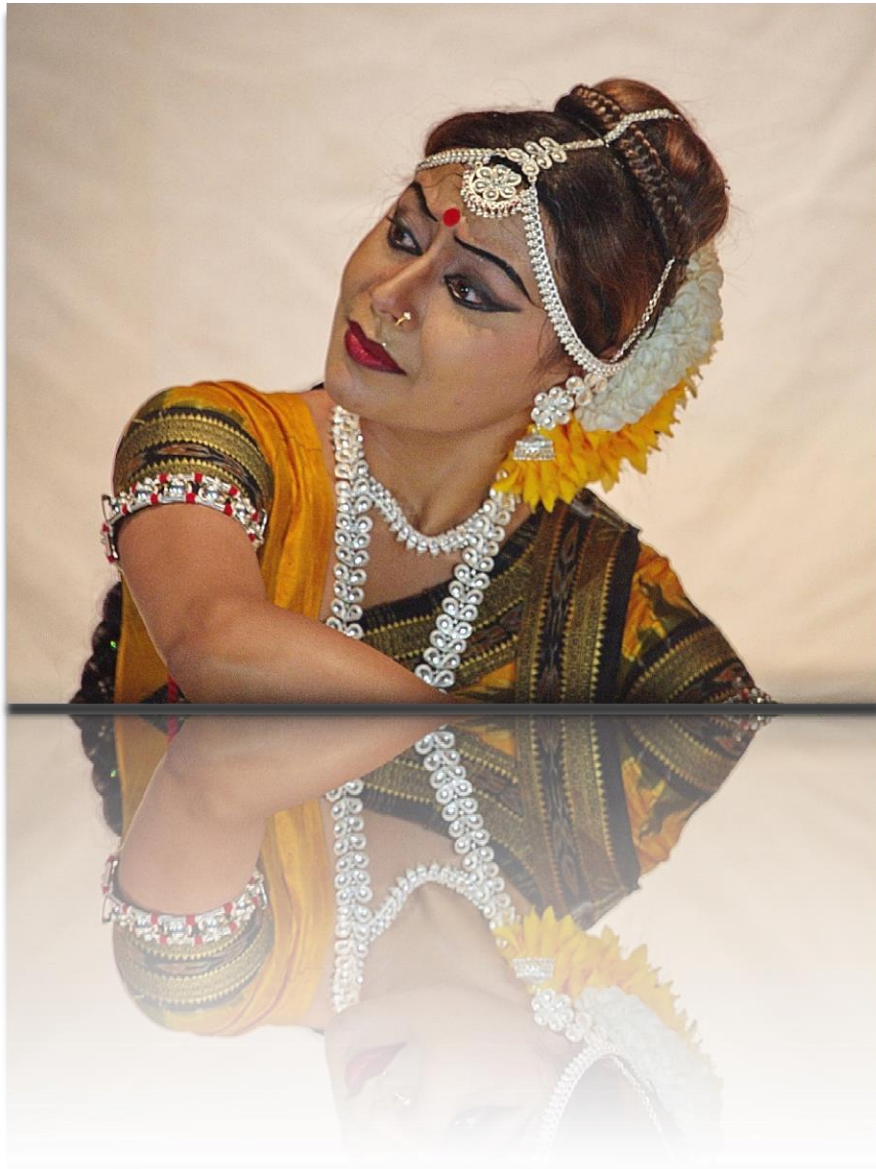


Fig. 1: Odissi Dance



Fig. 2: *Mahari* Shashimoni Devi



Fig. 3: *Gotipua* Dancers

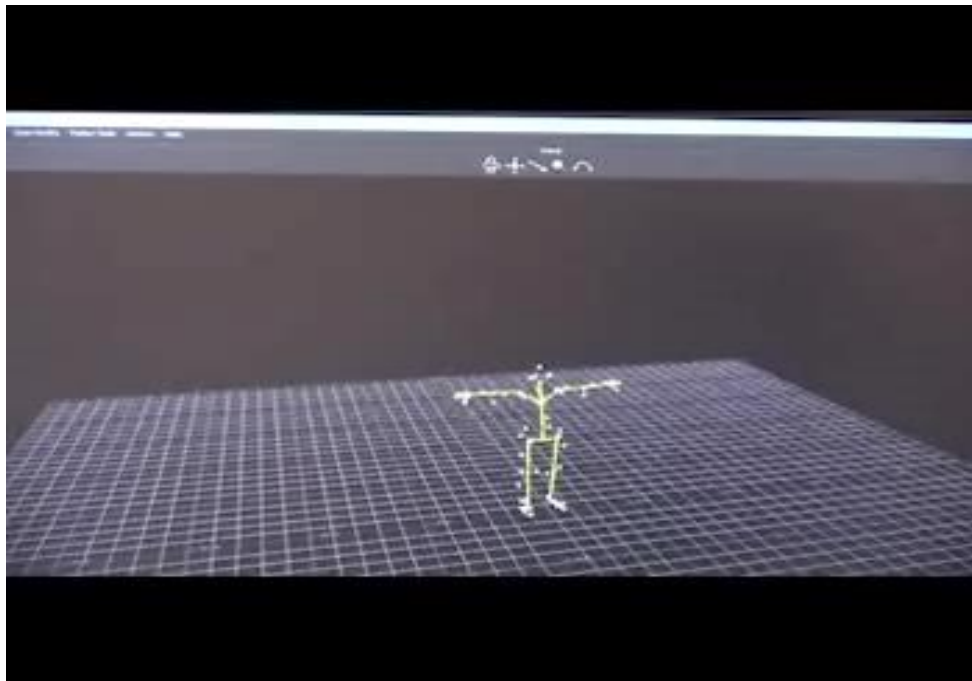


Fig. 4: Motion Capture Skeletal Visualization